



May 2014

Ada County Pest of the Month

A quick guide to identifying and controlling
invasive plants and animals found in the county

POISON HEMLOCK



Poison Hemlock is an erect biennial weed that can grow up to 9 feet tall.

In the first year of life, it germinates and forms a low growing fern-like rosette with shiny green, triangular leaves.

In the second year of life, Poison Hemlock produces a tall central hollow stalk with mottled purple spots that flowers and forms seeds. It has a thick, white tap root (often mistaken for a wild carrot).

It flowers in a small white umbrella-shaped cluster about 3 inches across.

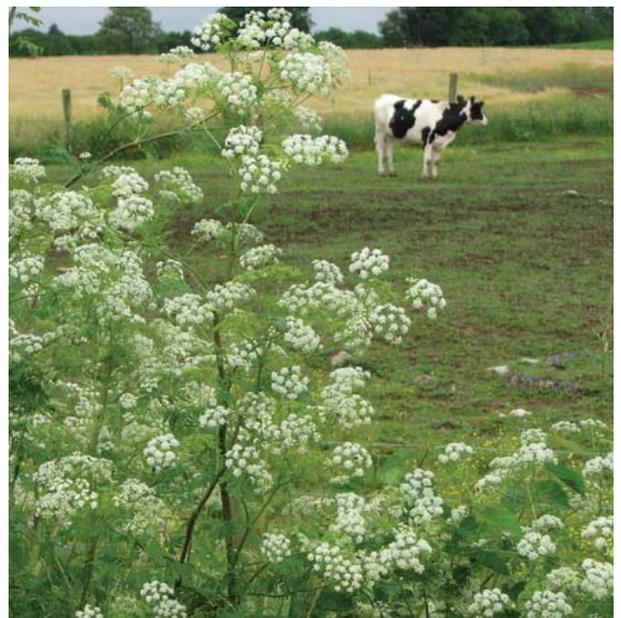
The disagreeable musty odor is one certain way to identify this noxious weed!

Quick Facts:

Because of its attractive flowers, Poison Hemlock was brought to the United States from Europe as a garden plant. It is found on poorly drained soils, particularly near streams, ditches, and other surface water.

The plant contains the alkaloids Coniine, N-methylconiine, conhydrine, pseudoconhydrine, g-coniceine and Atropine. The most important and toxic of these is Coniine. Coniine is a neurotoxin, which disrupts the workings of the central nervous system and is toxic to people and all classes of livestock.

Often, poisoning occurs after the victim confuses hemlock root with wild parsnips, hemlock leaves with parsley, or hemlock seed with anise. Whistles made from hollow stems of poison-hemlock have caused death in children.



How to Control:

Mechanical Control:

Hand removal is recommended for small infestations. When pulling the plants, the entire taproot should be removed to prevent regrowth. However, care must be taken with manual control to minimize soil disturbance that can encourage further germination of seeds at infested sites.

Plowing or repeated cultivation of newly germinated plants will prevent poison hemlock establishment.

In areas where cultivation isn't practical or possible, repeated mowing once the plants have bolted but before they have flowered can reduce further seed production.



Poison Hemlock in rosette stage.

Chemical Control:

Herbicides are most effective when applied to seedlings or small rosettes and not on fully mature plants.

The broadleaf selective herbicide 2,4-D is most effective when applied soon after plants reach the rosette stage. Both the amine and ester formulations of 2,4-D are effective. Using 2,4-D may make poison hemlock more attractive to livestock but doesn't change its toxicity, so some caution must be exercised if using 2,4-D in grazed pastureland or in silage production.

Like 2,4-D, triclopyr is also a broadleaf selective herbicide that is most effective on smaller plants. It doesn't kill most grasses. Apply it during the seedling to rosette stage of growth.

Glyphosate is nonselective, so exercise caution to minimize injury or mortality of desirable plants that might help suppress new poison hemlock seedlings. Apply to actively growing plants before they begin to bolt. Cooler temperatures can reduce the effectiveness of glyphosate.

Chlorsulfuron is somewhat selective against broadleaf weeds and not only gives excellent preemergent control but can also provide some postemergent foliar activity on poison hemlock. Desirable grasses should be well established before application. Apply chlorsulfuron to actively growing poison hemlock plants in the rosette stage. Other preemergent photosynthetic inhibitors, such as hexazinone, give excellent control of poison hemlock. In alfalfa, herbicides should be applied when the forage crop is dormant.

Treating poison hemlock with herbicides may require repeated applications for a couple of years until the seedbank has been depleted. Once the weed is under control, maintaining desirable forage species with proper pasture management, fertilization, irrigation, and drainage can effectively help prevent reinfestations.

Note: Chemical control of any weed can be difficult and confusing. If you are not experienced in chemical control or do not understand the product label, you should consult a licensed applicator to assist you. Inappropriate application can kill desirable vegetation, and may violate federal law.



For questions or concerns, please contact:

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